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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Shohei Koide Ph.D.  
Title: ARTIFICIAL ANTIBODY POLYPEPTIDES

Docket No.: 109.050US1  
Filed: July 11, 2001  
Examiner: T. Wessendorf

Serial No.: 09/903412  
Due Date: March 31, 2003  
Group Art Unit: 1639

Commissioner for Patents  
Washington, D.C. 20231

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We are transmitting herewith the following attached items (as indicated with an "X"):

- ☒ A return postcard.
- ☒ An Response to Restriction Requirement (3 Pages).
- ☒ Petition for Extension of Time (1 pg.), with authorization to charge fee to Deposit Acct. 19-0743.

If not provided for in a separate paper filed herewith, Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. Box 2938, Minneapolis, MN 55402 (612-373-6900)

By: Ann S. Viksnins  
Atty: Ann S. Viksnins  
Reg. No. 37,748

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on this 16th day of March, 2003.

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Candis B. Buending

Signature

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IEWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

P.O. Box 2938, Minneapolis, MN 55402 (612-373-6900)

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**PATENT**

Applicant: Shohei Koide Ph.D.

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**RESPONSE TO RESTRICTION REQUIREMENT**

Commissioner for Patents  
Washington, D.C. 20231

Applicant has reviewed the Restriction Requirement mailed December 31, 2002. This response is accompanied by a Petition, as well as the appropriate fee, to obtain a two-month extension of the period for responding to the Restriction Requirement, thereby moving the deadline for response from January 31, 2003 to March 31, 2003.

The Examiner has requested election of one of the following groups:

- I. Claims 1-8, drawn to a fibronectin type III molecule with mutation.
- II. Claims 9, 13-17 drawn to a fibronectin type III polypeptide monobody comprising of a plurality of Fn3  $\beta$ -strands.
- III. Claims 10-12, drawn to a nucleic acid, vector and host cell.
- IV. Claims 18-21, drawn to a nucleic acid, vector and host cell expressing the polypeptide of claim 1.
- V. Claim 22, drawn to a method of preparing FN3 polypeptide monobody.
- VI. Claim 23, drawn to a method of preparing an Fn3 polypeptide monobody comprising the step of preparing a PCR primer.
- VII. Claim 24, drawn to a method of preparing a polypeptide monobody comprising site-directed mutagenesis.
- VIII. Claim 25, drawn to a kit.
- IX. Claims 26-37, drawn to a variegated nucleic acid library.
- X. Claims 38-40, drawn to a peptide display library.
- XI. Claim 41, drawn to a method of identifying the amino acid sequence of a polypeptide that forms a complex.
- XII. Claim 42, drawn to a method of preparing a variegated nucleic acid library.

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Page 2

Docket: 109.050US1

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- XIII. Claim 43, drawn to a method of identifying an amino acid sequence of a polypeptide capable of catalyzing a chemical reaction.
- XIV. Claim 44, drawn to a method of preparing a variegated nucleic acid library with mutations.
- XV. Claim 45, drawn to an isolated polypeptide.
- XVI. Claim 46, drawn to an isolated polypeptide.
- XVII. Claims 47 and 49, drawn to a kit and polypeptide.
- XVIII. Claims 48 and 50, drawn to a kit and polypeptide.

Applicant provisionally elects, with traverse, the claims of Group I (claims 1-8). The examiner indicated that if Group I is elected, application must elect a single species for the Asp mutation as follows: (1) deletion or (2) substitution. Applicant elects species (2) substitution. The examiner indicated that if (2) substitution is elected, then applicant must specify the residue elected. Applicant elects residue 7. The examiner also indicated that applicant must select what residue would substitute for the Asp at residue 7, *i.e.*, either Asn or Lys. Applicant elects Asn. In summary, Applicant elects for examination at this time Group I, where Asn is substituted for Asp at residue 7. All the claims within Group I (claims 1-8) are readable on this election.

Applicant respectfully traverses the Restriction Requirement. The Restriction Requirement is traversed on the basis that Restriction Requirements are optional in all cases. M.P.E.P. § 803. If the search and examination of an entire application can be made without serious burden, the Examiner must examine it on the merits, even though it arguably may include claims to distinct or independent inventions. M.P.E.P. § 803. In light of this, it is submitted that Applicant should not be required to incur additional costs associated with the filing of multiple divisional applications in order to obtain protection for the claimed subject matter.

The examiner is reminded that M.P.E.P. § 803.02 states that "if the members of the Markush group are sufficiently few in number or so closely related that a search and examination of the entire claim can be made without serious burden, the examiner must examine all the members of the Markush group in the claim on the merits, even though they are directed to independent and distinct inventions. In such a case, the examiner will not . . . require restriction.

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Page 3

Docket: 109.050US1

[S]hould no prior art be found that anticipates or renders obvious the elected species, the search of the Markush-type claim will be extended. . . .The prior art search will be extended to the extent necessary to determine patentability of the Markush-type claim."

Applicant respectfully traverses the election of species requirement associated with the election of group I. The members of the Markush group in claims 3 and 4 are very few in number; *i.e.*, only two members, and each member varies from the other member by only one or two amino acid residues – Asp 7 and/or Asp 23. Thus, a search and examination of the entire claim can be made without serious burden on the examiner. Further, the examiner is reminded that if no prior art is found that anticipates or renders obvious the elected species, the search of the Markush-type claim will be extended to the extent necessary to determine patentability of the Markush-type claim.

Applicant respectfully requests a favorable examination of the merits of this patent application. The Examiner is invited to telephone Applicant's attorney at (612) 339-6961 to facilitate prosecution of this application. Please charge any additional fees deemed necessary to Deposit Account 19-0743.

Respectfully submitted,

SHOHEI KOIDE PH.D.

By his Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. Box 2938  
Minneapolis, MN 55402  
612-373-6961

Date 5 March 2003

By

Ann S. Viksnins

Reg. No. 37,748

**CERTIFICATE UNDER 37 CFR 1.8:** The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on this 6th day of March 2003.

**Candis B. Buending**

Name

Signature